

Title (en)

Method of and apparatus for processing image signal.

Title (de)

Verfahren und Vorrichtung zur Bildsignalverarbeitung.

Title (fr)

Procédé et appareil de traitement de signaux d'image.

Publication

**EP 0365037 B1 19940810 (EN)**

Application

**EP 89119531 A 19891020**

Priority

JP 26560188 A 19881020

Abstract (en)

[origin: EP0365037A2] A new image ( $S_{min ij}$ ) is generated from an image signal ( $S_{ij}$ ) by determining whether the configuration of the distribution of the image signal ( $S_{ij}$ ) at a point of interest ( $i, j$ ) is upwardly convex, or a downwardly convex, or otherwise, employing, as the new image signal ( $S_{min ij}$ ), the original image signal ( $S_{ij}$ ) at the point of interest ( $i, j$ ) if the configuration is upwardly convex or downwardly convex, and employing, as the new image signal ( $S_{min ij}$ ), an unsharp signal ( $U_{ij}$ ) if the configuration is otherwise. A differential signal ( $S_{ij} - U_{ij}$ ), or an absolute signal  $|S_{ij} - U_{ij}|$ , or a square signal  $((S_{ij} - U_{ij})^2)$ , or a Laplacian signal ( $\nabla^2 S_{ij}$ ) is compared with a threshold signal ( $T$ ) to determine whether the configuration of the distribution of the image signal ( $S_{ij}$ ) at a point of interest ( $i, j$ ) is upwardly convex, or a downwardly convex, or otherwise. The unsharp signal ( $U_{ij}$ ) comprises an average signal ( $U_{aveij}$ ) or a median signal ( $U_{medij}$ ) in a region including the point of interest ( $i, j$ ). A sharpness emphasizing signal ( $S^*_{ij}$ ) is calculated from the new image signal ( $S_{min ij}$ ) and the unsharp signal ( $U_{ij}$ ) according to the equation:  $S^*_{ij} = S_{min ij} + K(S_{min ij} - U_{ij})$  where  $K$  is a coefficient signal.

IPC 1-7

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IPC 8 full level

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CPC (source: EP US)

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